Special Issue

Functionalized Polymeric Biomaterials: Design and Applications

Message from the Guest Editors

The functionalization of biomaterials offers a promising strategy for improving the response of the organism to the implant. The synthesis of these functionalized biomaterials must consider the employment of biocompatible molecules, such as silk or collagen, that, in addition, should be produced in different formats (e.g., films, fibers, sponges, gels) by using appropriate processing techniques. Since functionalization requires the introduction at the surface of the material of reactive groups, it is possible to consider different crosslinking chemistries compatible with each material and format. The need to bind the reactive moieties to the material also offers a nice opportunity to employ Genetic Engineering techniques to enhance the properties exhibited by the natural material. In this context, this Special Issue aims to provide an updated view of the main promises and challenges of using this type of material for biomedical applications.

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Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the Journal of Functional Biomaterials (JFB) is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. JFB seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

Editor-in-Chief

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